PB88-241237

# Health Effects Information Relating to Particulate Matter

(U.S.) Environmental Protection Agency
Washington, DC

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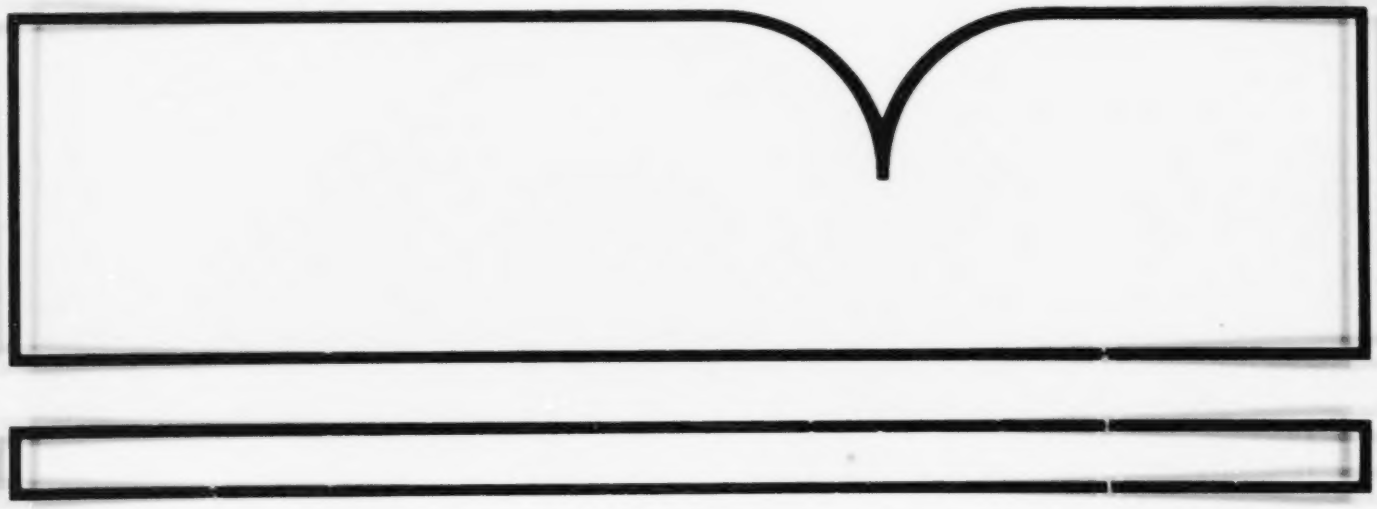

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15. Supplementary Notes

16. Abstract (Limit: 200 words)

CASAC's preliminary view indicates that the new data does not require a fundamental alteration of the structure of the proposed particulate standards and does not fundamentally change CASAC's understanding of the mechanisms by which particulate exposures effects public health. However, the Committee and many members of the public have serious concern as to whether the current proposed ranges of interest are as scientifically supportable as they were in November 1981 when last examined by CASAC. The Committee made three major recommenations: 1) that an addendum to the existing particulate matter criteria document be prepared; 2) that an addendum to the existing particulate matter staff paper be prepared; and 3) that the Agency prepared an issues paper evaluating the scientific issues pertaining to acidic aerosols.

17. Document Analysis a. Descriptors

Clean Air Scientific Advisory Committee

b. Identifiers/Open-Ended Terms

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SAB-CASAC-86-008

January 2, 1986

Honorable Lee M. Thomas
Administrator
U.S. Environmental Protection
Agency
Washington, D.C. 20460

Dear Mr. Thomas:

The Clean Air Scientific Advisory Committee (CASAC) met on December 16-17, 1985 to hold a preliminary discussion with EPA staff and members of the public on health effects information relating to particulate matter that has become available since the Committee's last official review of such data. This new scientific information includes: respiratory tract regional deposition patterns; epidemiological studies of mortality and morbidity effects associated with both short-term and long-term particulate exposures; and health effects related to acid aerosols.

The Committee's preliminary view of this body of data is that it does not require a fundamental alteration of the structure of the proposed particulate standards at this time or fundamentally change our understanding of the mechanisms by which particulate exposures affect public health. These new data are consistent with many earlier findings. However, they lead the Committee and many members of the public to have serious concern as to whether the current proposed ranges of interest are as scientifically supportable as they were in November 1981 when they were last examined by CASAC. Much of the new data suggest the need to focus consideration on standards at or perhaps below the low ends of the ranges proposed in the March 20, 1984 Federal Register Notice.

To resolve these and other issues raised by the new studies, CASAC recommends the following:

- That the staff of the Environmental Criteria and Assessment Office prepare an addendum to the existing Air Quality Criteria Document for Sulfur Oxides/Particulates and evaluate the scientific adequacy of new health effects data for particulate matter and their implications and relevance to standards-setting.

- That the staff of the Office of Air Quality Planning and Standards prepare an addendum to the existing Staff Paper for Particulate Matter and evaluate, in particular, whether the recently available scientific studies alter their thinking on the proposed ranges of interest.

CASAC believes that the Agency would be well served by the preparation and public and scientific review of such documents because these data will strengthen the scientific basis of policy decisions you must make on particulate matter; in addition, the Agency will demonstrate its capacity to update its scientific assessments through a process which CASAC and the public believe is credible. It is not the Committee's intent that preparation of these addenda needs to result in a re-examination of all major issues previously evaluated. Rather, we hope that the Agency can develop them in a targeted and expeditious manner that would not significantly delay the promulgation of particulate standards.

Finally, CASAC recommends that EPA formally evaluate in an issues paper the host of scientific issues pertaining to acid aerosols and their applicability to setting a separate standard for this class of pollutants. There is a growing body of data supporting the view that acid aerosols are associated with health effects that a general particulate standard may not protect against. In addition, some studies have reported quantitative response relationships in concentration levels beginning to be applicable to standard setting. Because the time requirements for developing an acid aerosols assessment are likely to be longer than those needed for preparing the criteria document and staff paper addenda, the CASAC recommends that EPA plan a separate schedule for this issue and not delay the particulate standard promulgation timetable.

The Committee would appreciate hearing your views on its recommendations.

Sincerely,

Morton Lippmann
Chairman
Clean Air Scientific Advisory
Committee

cc: A. James Barnes
Donald Ehreth
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Lester Grant
Terry Yosie